

#### **AMENDMENTS TO THE DISCLOSURE**

Please replace last paragraph on page 10 lines 16-23 with the following paragraph:

In further reference to Figs. 1 and 2 when a brake application is made, pressurization of the air spring actuator, generally designated 50, will result in movement of pushrod/shield actuating member, generally designated 60, connected with force transfer lever 14 in a forward direction to effect a counterclockwise rotation of said force transfer lever 14. The force transfer lever 14, in turn, actuates the slack adjuster assembly 28 to effect counterclockwise rotation of the force-

Please replace last paragraph on page 15 lines 18-24 with the following paragraph:

In the preferred embodiment, upon discharge of the spring actuator 50, stop portion 77 of pushrod/shield actuating member 60 will engage a third edge portion 86 of the mounting bracket 80 preventing further motion of the spring actuator 50 and, more particularly, preventing damage to air spring 52. Alternatively, stop 77 can be incorporated and disposed internally within air spring 52 having substantially identical functionality as edge portion 86.

Please replace the paragraphs on page 12 line 5 through page 14 line 23 with the following paragraphs:

In a particular reference to FIGS. 2-3 air brake actuator assembly 40 consists of at least one air spring actuator 50 disposed ~~within pushrod/shield~~ between the actuating member 60 and a mounting bracket member, generally designated 80. When installed in the truck mounted brake assembly 10, the at [[At]] least one air spring actuator 50 has ~~52~~ is substantially attached to a first substantially vertical surface 54 and an opposed second surface 56 spaced apart from and disposed substantially coplanar to ~~said~~ the first substantially vertical surface 54. At least one inflatable air bag or air spring 52 is disposed between end surfaces 54 and 54 and defines an exterior peripheral surface 53 of the air spring 52. Each end surface 52, 54 has at least one and, preferably a plurality of mounting members 58 extending outwardly therefrom.

A pushrod/shield The actuating member 60 includes a first plate member 61 disposed substantially vertically during use of the air brake actuator assembly 40, the first substantially vertically disposed plate member 61 having a first substantially planar surface 66 abuttingly engageable with a substantially vertically disposed surface thereof disposed in abutting relationship with the end surface 54 of the air ~~bae~~ spring

actuator 50, the first substantially vertically disposed plate member 61 exposing at least a first portion of an the exterior peripheral surface 53 of the at least one inflatable air bag spring 52 to an atmospheric operating environment characterized by a presence of detrimental extraneous foreign material when the railway car mounted brake assembly 10 is in use.

The first plate member 61 further has a plurality of first mounting apertures 68 formed through a thickness thereof, each of the plurality of first mounting apertures 68 aligned with and sized to pass therethrough a respective one of the plurality of mounting members 58 extending outwardly from the end surface 54.

The actuating member 60 also includes a pair of plate portions 64, 66 disposed planar with the first plate member 61 adjacent a top edge thereof. One plate portion, labeled as 64 in FFIG. 3, protrudes outwardly from a side edge 62 of the first plate member 61. The other plate portion, labeled as 65 in FFIG. 3, protrudes outwardly from an opposed side edge 63 of the first plate member 61.

A structure is disposed on and attached to an opposed second surface 67 of the first plate member 61 for securing the actuating member 60 to an actuating linkage of the railway vehicle brake assembly 10. Such structure includes a pair of elongated members 72 disposed substantially horizontally and spaced apart in a vertical plane during use of the air brake

assembly 40, each of the pair of spaced apart elongated members 72 having a proximal end thereof disposed on and attached to an opposed substantially planar surface 67 of the first plate member 61, a distal end thereof extending outwardly and substantially perpendicular to the first plate member 61, and an aperture 74 formed through a thickness of the each of the pair of elongated members 72 adjacent to and spaced from the distal end thereof. The apertures 74 are employed for connection for force-transfer levers 14 and 16 by pins 19.

The actuating member 61 additionally includes a second plate member 64 disposed substantially horizontally during use of the air brake actuator assembly 40. The second plate member 64 is directly attached to the first plate member 61 at a bottom edge thereof and extends substantially perpendicular to the first substantially planar surface 66 of the first plate member 61 for shielding at least a first portion of the exterior peripheral surface 53 of the air spring actuator 50 from the detrimental extraneous foreign material.

The actuating member 61 further includes a third plate member 76 connected to an upper surface of the second plate member 64 and to the first planar surface 66 of the first plate member 61 adjacent side edge 63 thereof and extending substantially perpendicular to at least the first plate member 61 for shielding at least a second portion of the exterior

peripheral surface 53 of the air spring actuator 50 from the detrimental extraneous foreign material and for providing added strength between the first plate member and the second plate member.

~~is connected to the first substantially vertical surface 54 of the air spring 52 wherein at least one mounting member 58 will cooperate with at least one mounting cavity 68 disposed within first substantially vertical surface 66 of the pushrod/shield 60.~~

~~In the presently preferred embodiment this at least one mounting member 58 and at least one mounting cavity aperture 68 are four mounting members 58 and four mounting cavities 68 respectively.~~

~~This pushrod/shield actuating member 60 is capable of movement in an outward direction upon actuation of the air spring 52 to initiate a braking sequence of the railway vehicle braking system 10. A mounting bracket 80 is connected to the opposed second surface 56 of the air spring 52 wherein at least one mounting member 58 cooperates with an at least one mounting cavity 88 disposed within surface 82 of the mounting bracket 80. In the presently preferred embodiment there are four mounting members 58 and four mounting cavities 88 respectively.~~

In further reference to FIGS. 2-3, the air brake actuator assembly 40 includes a mounting member or bracket, generally

designated as 80. The mounting bracket 80 includes a plate member 81, which is disposed substantially vertically during use of the air brake actuator assembly 40. The plate member 81 has a first substantially planar surface portion 82 thereof disposed in abutting relationship with the end surface 56 of the air spring actuator 50. The plate member 81 further has a plurality of mounting apertures 88 formed through a thickness thereof, each of the plurality of mounting apertures 88 aligned with and sized to pass therethrough a respective one of the plurality of mounting members 58 extending outwardly from the end surface 56. The plate member 81 exposes the exterior peripheral surface 53 of the at least one inflatable air spring 50 to an atmospheric operating environment characterized by a presence of detrimental extraneous foreign material when the railway car mounted brake assembly 10 is in use.

The mounting bracket 80 further includes a pair of elongated members 81A and 81B. Each of the pair of elongated members 81A and 81B has a proximal end thereof disposed on and attached to the plate member 81 adjacent one side edge thereof. Each of the pair of elongated members 81A and 81B extends outwardly from the first substantially planar surface 82 of the plate member 81 to cover a portion of the peripheral exterior surface 53 of the air spring actuator 52. A portion of at least one of the pair of elongated members 81A and 81B, labeled as 81A

in FIG. 3, carrying the proximal end thereof has a greater width than the remaining portion of the elongated member 81A. Such portion defines an edge 86 disposed generally perpendicular to a top edge 94 of the elongated member 81A. The edge 86 abuts the first substantially planar surface of 66 of the first plate member 61 to limit motion of the air spring actuator 50.

There is also a structure disposed on and attached to an opposed substantially planar surface 83 of the plate member 81, the structure attaching the mounting member 81 to a rigid structure.

The structure includes a flange 85 disposed, in a substantially horizontal plane during use of the air brake actuator assembly 40, on and extending outwardly from the opposed substantially planar surface 83 of the plate member 81 and a pair of apertures 98 formed through a thickness of the flange 85 in a spaced apart relationship along a length of the flange 85.

In further reference to FIG. 2, at least one cavity aperture 98 is provided for attachment of such mounting bracket 80 to the compression member 4. In the presently preferred embodiment there are two cavities 98. Furthermore, a support portion 100 substantially engages strut member 8 having tab member 102 and at least one mounting cavity 104 for attachment to such strut member 8 is provided to substantially minimize

force loads acting on the brake actuator assembly 40 upon actuation of the hand brake mechanism (not shown). The support portion 100 extends outwardly from one side edge of the plate member 81.

The air spring 52 includes air communication means 41, best shown in FIG. 2, in fluid communication with an interior portion of at least one air spring 52 for supplying air pressure to such at least one air spring 52 to cause actuation of this air spring 52 during a brake application and also for removing or evacuating air from the air spring 52 to cause deactivation of the air spring 52 during a brake release. In the presently preferred embodiment, this air communication means 41 is at least one air inlet port. Cavity Aperture 97 disposed is provided within the plate member 81 of the mounting bracket 80 and is substantially aligned with the air communication means 41 to enable application of the pneumatic pressure within air spring 52. Forces generated upon pressurization of the air spring 52 vary with the respect to their travel height due to the natural characteristics of the rubber. The pressurization and discharge of the air spring actuator is regulated by an external control circuit (not shown). Furthermore, these forces vary at the constant pressure applied to the air spring 52.

Any commercially available inflatable spring 52 may be used as long as this spring is capable of withstanding the amount of

air pressure applied thereto and capable of providing sufficient force to move ~~pushrod/shield~~ actuating member 60 to initiate a braking sequence.

~~At least one cavity 74 is provided in at least one force transfer lever engaging portion 72 of such pushrod/shield 60 for connection with force transfer levers 14 and 16 by pins 19. In further reference to FIG. 3, pushrod/shield actuating member 60 having second and third surface portions 64, 76, and 77 substantially horizontal to first substantially vertical surface portion 66 protects air spring actuator 50 from foreign objects during railway vehicle movement. First edge portion 70 and second edge portion 78 of the first plate member 61 engage first edge portion 84 and second edge portion 94 respectively of the mounting bracket 80 for guiding the air spring actuator 50 during reciprocal movement of such air spring actuator 50 to provide for linkage bail and/or misalignment without applying loads to the air spring actuator 50.~~